ABSTRACT

The invention relates to novel plant and process for 5 producing liquefied natural gas. The plant of the invention is of the type that comprises one natural gas pre-cooling heat exchanger having an inlet for natural gas and an outlet for cooled natural gas, optionally a distributor 10 having an inlet connected to the outlet for cooled natural gas and having one or more outlets, and one or more main heat exchangers each comprising a first hot side having one inlet connected to one outlet of the distributor and an outlet for liquefied natural gas, which plant further 15 comprises a pre-cooling refrigerant circuit for removing heat from the natural gas in the natural gas pre-cooling heat exchanger, and one or more main refrigerant circuits for removing heat from natural gas flowing through the first hot side of the corresponding main heat exchanger.

The invention is based on the use of separate precooling circuits: one for the pre-cooling of the natural gas and one for the pre-cooling of the main refrigerant.

25 Fig. 1